

Direct Testimony
of
Frederick D. Abraham

Identification of witness and qualifications

Q. What are your name and position?

A. My name is **Frederick D. Abraham**, and at the request of William D. Orr, to supplement his testimony, I am assisting his representation of landowners (including my wife, legal owner of our home), known in PSB Docket 7032 as the ***Gregg Hill Residents***.

Q. What are your qualifications?

A. My wife and I have been residents of Gregg Hill for over 25 years. I am a scientist (brain research and psychology), university professor, semi-retired, and author. My interest in the beauty and quiet enjoyment of the Gregg Hill environment and the Mansfield State Forest (which is adjacent to our property), is evident not only in my being a principal architect of two successful petitions to the Water Resources Board for compromises between paddlers and motorized use of the Waterbury Reservoir (for which effort, I, and two colleagues received the Vermont Chapter of the Sierra Club's Person of the year award), but also from the acknowledgements in my book, *A Visual Introduction to Dynamical Systems Theory for Psychology* (1990), which includes,

“Thanks also to the state of Vermont for maintaining such a beautiful [Mansfield] State Forest and its Waterbury Reservoir at my doorstep for canoeing, mountain biking, skiing, and the

1 simple wilderness pleasure of communicating with the animals,
2 plants, and the beauty of this serene wilderness.”
3

4 **Overview**

5 Q. What is the purpose of your testimony?

6 A. To supplement the testimony of William D. Orr, representative of the
7 Gregg Hill Residents, at his request, on two points:

- 8 1. To testify that the alternative route proposed by the Gregg Hill
9 Residents for the 115 kV/34.5 kV lines proposed by VELCO
10 will not be visible from Route 100, and
11 2. That the route proposed by VELCO has a negative aesthetic impact
12 on our home and subsequently on the aesthetics of our
13 neighborhood.

14 **Applying Criterion 8 of the Quechee Test**

15 Q. What sections of 30 V.S.A §248 are addressed by your testimony?

16 A. Subdivision (b)(5) dealing with *undue adverse effects* on aesthetics. The
17 testimony of Bill Orr already addresses this issue very adequately, and I
18 reiterate that the *undue adverse effects* on the aesthetics of the Gregg Hill
19 neighborhood is perhaps greatest with the Mansfield State Forest, because
20 of the proximity of the existing and proposed lines by VELCO to Gregg
21 Hill Road, and with the Magdamo-Abraham, Bankson, and Orr,
22 properties, for the same reason, proximity to Gregg Hill Road, and
23 especially because the VELCO proposal places the lines between the road
24 and the Magdamo-Abraham and Orr homes. This *undue adverse effect* on

1 aesthetics is not only upon hikers, bikers, and vehicular occupants using
2 the road, but also upon the enjoyment of the magnificent westward views
3 of forest, meadows, and mountains from these homes. These *undue*
4 *adverse effects* are especially exacerbated by the effects of the major
5 clearing in the right-of-way for the lines, which exposes the poles more to
6 view, removes the beauty of the plants and trees now there, and also
7 exposes vehicular traffic on the road to view from these homes, which has
8 been largely hidden by shrubs and trees. Our principal concern is with the
9 effects for the neighborhood and what the preservation of our
10 neighborhood means for the good of Vermont, but we cannot but admit a
11 concern for our own aesthetic enjoyment as well.

12 **The improved aesthetic of our proposal: Making the line less visible from Gregg Hill**
13 **Road without adversely affecting the views from Route 100**

14 Q. What portion of the approximately one mile alternative route are you
15 addressing?

16 A. The approximately 900 foot portion through the Mansfield State Forest,
17 and approximately the next 1000-1500' along the crest behind the
18 Magdamo-Abraham and Orr properties which can be seen from a short
19 section of Route 100 from just south of the entrance to Gregg Hill Road to
20 possibly Evergreen Nurseries/Green Mountain Club headquarters.

21 Q. What is the nature of the terrain and forest in this area that would hide the
22 line from the view from Route 100?

1 A. Most of Route 100 is at an approximately 700-foot elevation, while the
2 ridge of forest along the proposed route crests behind the Magdamo-
3 Abraham property at just over 800 feet. Thus there is no increase in
4 elevation of Route 100 over the crest in question that could make viewing
5 the line more likely from Route 100. This crest is a plateau for a couple of
6 hundred feet east of the proposed line before dropping steeply into a
7 valley, and is comprised of a dense stand of tall trees, mostly maples over
8 100 feet high, and some as high as 135 feet. (As measured by use of a
9 level, a tape measure, and paper and pencil, viewing the top of the trees
10 from 100 foot distance, marking the leveled paper sighting from a lower
11 distal corner to the opposite proximal side of the paper, and using simple
12 geometry of similar triangles and algebra to extrapolate the height of the
13 trees.) These trees would be more than adequate to hide a line of any
14 height that VELCO might propose for this route.

15 Q. How would this mitigate the *undue adverse effects* on aesthetics?

16 A. Mr. Orr has already made the argument for the improvement of the
17 aesthetics on the Gregg Hill neighborhood, that is, for the diminished
18 negative impact compared to that of the VELCO proposal.

19 ***Undue adverse effects on aesthetics, environment, and noise for our property.***

20 Q. How would the lines and the condition of the right-of-way along the route
21 proposed by VELCO change from those currently existing?

22 A. **First** and foremost, the poles would be more than double in height, going

1 from the current 35 feet, to 79 feet. The present lines are partially
2 obscured for much of our view by trees and shrubs and low enough where
3 viewable so as to be minimally obtrusive to our view, being nearer to view
4 of the road below us. The new poles and lines would raise the lines in our
5 view to above the tops of the Green Mountains (Bolton, Stevens), making
6 them much more visible, intrusive, and ugly.

7 **Secondly**, the right-of-way might be clear-cut, taking out many of the big
8 trees and shrubs and, as noted previously, making the lines visible for the
9 whole of our view, not just for the short stretch of 100 or so feet. This
10 would also make traffic more visible and noisy. Please also note, that this
11 clear-cutting would also take out trees from the Mansfield State Forest.

12 Which would not only be part of our view, but increase the negative
13 aesthetic impact on the Mansfield State Forest, as compared to the path we
14 propose, which would take it away from Gregg Hill Road at a sharper
15 angle, and put it more out of view from the road. The argument for the
16 improved aesthetic for the Gregg Hill neighborhood has also already been
17 made in the testimony of Bill Orr.

18 **Thirdly**, if there are two sets of poles, the negative impact on aesthetics is
19 increased even more, both for our properties, and for the aesthetics of the
20 entire neighborhood.

21 **Appendices:** Photos and a map are submitted as exhibits to support this
22 testimony.

1 **Figure 1.** Topographical map by ANR showing approximate location of the
2 alternative route proposed by the Gregg Hill Residents, and the
3 approximate locations of the two photos of Figures 2 & 3. The location of
4 the Magdamo-Abraham property, and the adjacent State Forest and Lyon
5 Farm can be found.

6 **Figure 2.** Photo taken from Route 100 between Gregg Hill Road and Waterbury
7 Center, looking westward over the Chittenden, Mansfield, and Lyon
8 properties. The two rows of dark green trees are on the Chittenden and
9 Lyon properties, and the ones on the Lyon Farm hide the view of most of
10 the forest where the alternative is proposed, with just a small portion of
11 that forest visible.

12 **Figure 3.** Photo take from Route 100 just north of the start of Gregg Hill Road,
13 looking westward over the Mansfield and Lyon Farms. The forest of the
14 alternative Route is the long gentle ridge behind these farms. Note that to
15 the right is the beginning of trees on hills of 800-900' (see Map of Fig. 1),
16 which obscure the remainder of the alternative route northward..

17 **Figure 4.** Photo looking eastward from the back of the Magdamo-Abraham
18 property. The line of large trees at rear are on the Lyon property just past
19 the property boundary. Big, aren't they? The clump in the center, about
20 ten feet beyond the property line, are over 100' tall.

21 **Figure 5.** Photo, approximately same location as previous photo, but about 100
22 feet eastward and also looking eastward, shows a clump of trees about
23 150' eastward of the property line. Some are over 125' tall. These trees are

1 indicative of the whole ridge at the back of the Bankson, Orr, and
2 Magdamo-Abraham properties and sloping downward to the south through
3 the Mansfield State Forest.

4 **Figure 6.** Photo also taken from rear of Magdamo-Abraham property, looking
5 east-south-east toward the corner of the, the Lyon property, and the
6 Magdamo Abraham property, at the Mansfield State Forest, where the
7 proposed alternate line would approach from the Mansfield State Forest to
8 that corner. The right-of-way would run northward along the Magdamo-
9 Abraham property line, on the Magdamo-Abraham property.

10 **Figure 7.** Photo taken from the deck of the Magdamo-Abraham property looking
11 westward toward the view of the Green Mountains (including Bolton
12 Mountain). The pole on the right is the present transmission line; the one
13 on the left is the feed from the distribution line to the Magdamo-Abraham
14 home. These poles are partially hidden by the slope down from the lawn.
15 The new poles would tower much higher, bringing the lines up to about
16 the level of the tops of the mountains, possibly higher into the sky-view.
17 The clearing of trees would remove stands of trees beyond the hemlock on
18 the left and southward from there, and to the right of this photo, from
19 about 25' beyond the clump in the right foreground.

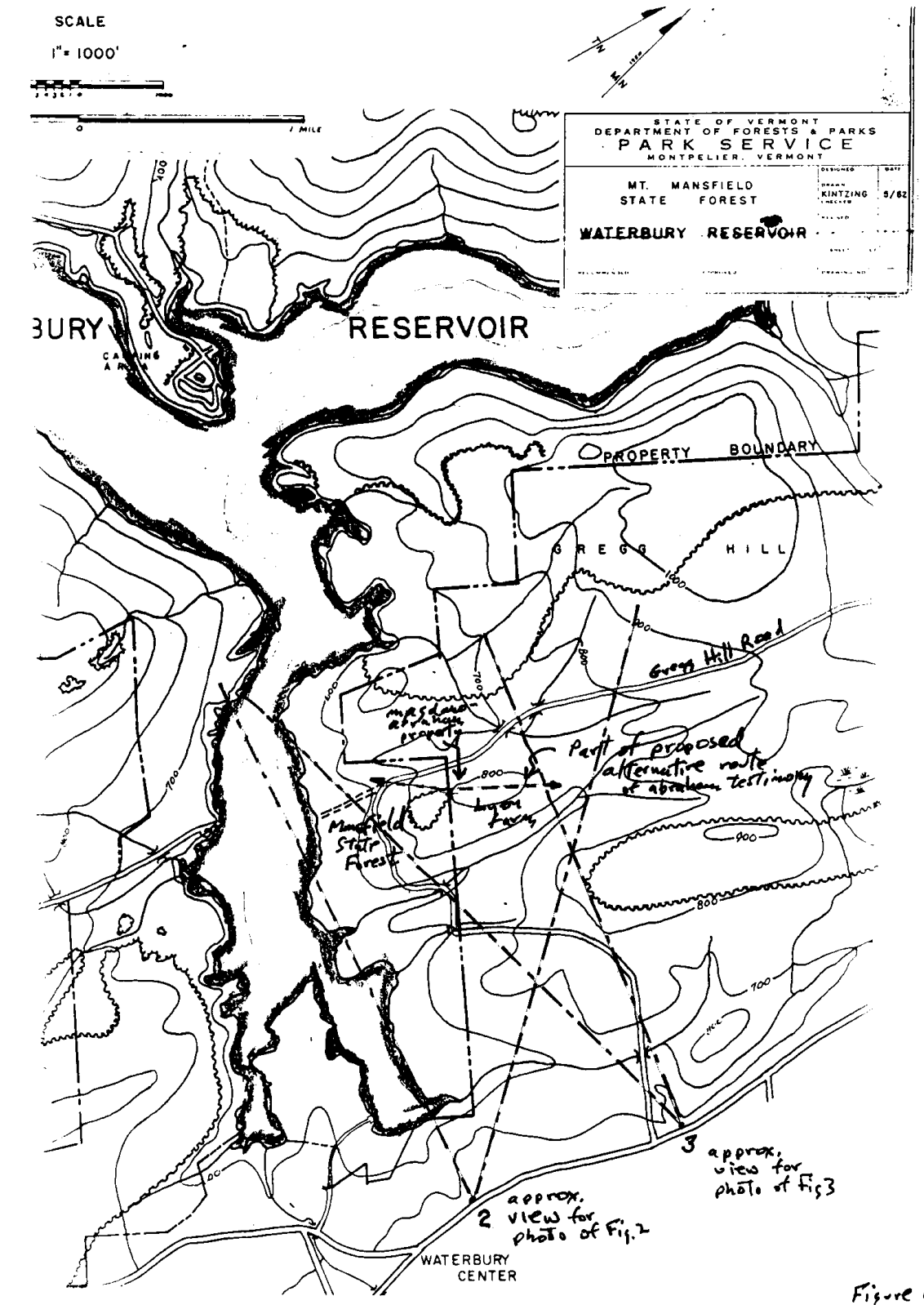


Figure 1

1



Figure 2. Looking westward from Route 100 near Waterbury Center.



Figure 3. Looking westward from Route 100 just north of Gregg Hill Road.



Figure 4 Trees east of proposed route.



Figure 5. Trees on Lyon property.



Figure 6. Mansfield State Forest in background from Magdamo-Abraham property, looking south-eastward..



Figure 7. View westward from Magdamo-Abraham residence.